Data Record on Coded Wire Tags Recovered from Juvenile Salmonids at Campbell River Estuary and Discovery Passage, 1985

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These reports provide a medium for filing and archiving data compilations where little or no analysis is included. Such compilations commonly will have been prepared in support of other journal publications or reports. The subject matter of Data Reports reflects the broad interests and policies of the Department of Fisheries and Oceans, namely, fisheries management, technology and development, ocean sciences, and aquatic environments relevant to Canada.

Numbers 1-25 in this series were issued as Fisheries and Marine Service Data Records. Numbers 26-160 were issued as Department of Fisheries and the Environment, Fisheries and Marine Service Data Reports. The current series name was changed with report number 161.

The correct citation appears above the abstract of each report.

Rapport statistique canadien des sciences halieutiques et aquatiques

Ces rapports servent de base à la compilation des données de classement et d'archives pour lesquelles il y a peu ou point d'analyse. Cette compilation aura d'ordinaire été préparée pour appuyer d'autres publications ou rapports. Les sujets des Rapports statistiques reflètent la vaste gamme des intérêts et politiques du Ministère des Pêches et des Océans, notamment gestion des pêches, techniques et développement, sciences océaniques et environnements aquatiques, au Canada.

Les numéros 1 à 25 de cette série ont été publiés à titre de Records statistiques, Service des pêches et de la mer. Les numéros 26-160 ont été publiés à titre de Rapports statistiques du Service des pêches et de la mer, Ministère des Pêches et de l'Environnement. Le nom de la série a été modifié à partir du numéro 161.

Le titre exact paraît au haut du résumé de chaque rapport.

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DATA RECORD ON CODED WIRE TAGS RECOVERED FROM JUVENILE SALMONIDS AT CAMPBELL RIVER ESTUARY AND DISCOVERY PASSAGE, 1985

by

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ABSTRACT

Kotyk, M. S., T. J. Brown, B. A. Kask, C. D. Levings, C. D. McAllister, and J. S. Macdonald. 1985. Data Record on Coded Wire Tags Recovered From Juvenile Salmonids at Campbell River Estuary and Discovery Passage, 1985. Can. Data. Rep. Fish. Aquat. Sci. 581: 19 p.

Data are presented on lengths, weights and coded wire tags of juvenile salmonids salmon sampled by beach seine in the Campbell River estuary and Discovery Passage in April to August 1985. Data are also provided on location, date, and time of capture.

RESUME

Kotyk, M. S., T. J. Brown, B. A. Kask, C. D. Levings, C. D. McAllister, and J. S. Macdonald. 1985. Data Record on Coded Wire Tags Recovered From Juvenile Salmonids at Campbell River Estuary and Discovery Passage, 1985. Can. Data. Rep. Fish. Aquat. Sci. 581: 19 p.

On présente des données sur la longueur, le poids el les étiquettes métalliques codées observés chez des salmonidés juvéniles capturés à l'aide de senne de rivage dans l'estuaire de la rivière Campbell et le passage Discovery d'auril à août 1985, en plus d'informations sur l'endroit, la date et le moment de la capture.

INTRODUCTION

In order to study the importance of estuarine habitats to juvenile salmonids, a beach seine sampling program was undertaken in the Campbell River estuary and Discovery Passage starting in March 1982. This study was designed primarily to compare the usage of man-made and natural habitats by juvenile chinook salmon. This report presents length, weight and coded wire tag data for marked juvenile salmonids sampled from April to August 1985. Length and weight data for unmarked juvenile salmonids sampled in this study are presented in Kotyk et al. (in prep).

Sampling procedures

Fish were caught using a 13.7 m beach seine with wings 4.6 m (1 cm stretched mesh), bunt 4.6 m (0.6 mm stretched mesh), and depth 3.0 m. The net was fitted with 15 m towing lines off the wings. Usually the net was pulled off the beach using a 5 m inflatable boat with a 60 hp outboard engine. The distance the net was taken offshore depended on local conditions such as currents, bottom topography, and floating obstacles (wharves, kelp beds) and therefore ranged from 5 to 15 m.

Catches were usually held in the bunt of the net while being subsampled. However, when numbers were too large for this to be feasible, they were held in floating cages (75 cm x 50 cm x 37 cm deep; 5 mm mesh size). Subsamples of the fish caught were fixed in 10% formalin. Fish were measured and weighed within 1 month of being captured; weighing was done on a Mettler PL3000 balance.

Sampling locations

Sampling was conducted at sites within the Campbell River estuary (Fig. 1), and Discovery Passage (Fig. 2). Descriptions of each of the sampling stations are presented in Brown et al. 1985. All stations occupied, including those where marked salmonids were not captured, are shown.

DATA

A total of 627 marked salmonids were subsampled from a total catch of 3267 Brown et al. (1986). Each fish was measured, weighed and assigned a unique number before the coded wire tag was extracted and read.

Table 1 includes the tag codes that were used for chinook and coho salmon from the Quinsam R. Hatchery in 1985. Table 2 includes the recapture data using the following format:

DATE- sampling date (year, month, day).
ST- sampling station number.
TIME PST- sampling time (Pacific Standard Time).
FISH NUM- a code identifying each fish uniquely, consisting of the letters MC and up to a 4 digit number.
TAG CODE- coded wire tag. "No pin" is indicated when none was found
L - fork length in mm.
WT- wet weight (after damp drying with paper towelling) in g.

ACKNOWLEDGEMENTS

Thanks are due to the staff at the Head Recovery Lab who did the majority of measuring and weighing of the fish, along with reading the coded wire tags.

REFERENCES

Kotyk, M.S., T. J. Brown, B. A. Kask, C. D. Levings, and C. D. McAllister, and J. S. Macdonald. 1986. Length and weight data for unmarked juvenile salmon sampled in the Campbell River estuary and Discovery Passage, 1985. Can. Data Rep. Fish. Aquat. Sci. (in prep).

Brown, T. J., M. Kotyk, B. A. Kask, C. D. Levings, C. D. McAllister, and J. S. Macdonald. 1985. Salmonid catch data from Campbell River and Discovery Passage, 1985. Can. Data. Rep. Fish. Aquat. Sci. 554: 77 p.

Table 1. Tag codes used for chinook and coho salmon from the Quinsam R. Harchery 1985.

Chinook	Coho
02-33-22	02-29-16
02-33-23	02-29-17
02-33-24	02-29-18
02-33-25	02-29-19
02-33-26	02-29-20
02-33-27	02-29-21
02-33-28	02-29-22
02-33-29	02-29-23
02-33-30	02-29-49
08-23-51	02-29-50
08-23-52	02-29-51
08-23-53	08-23-13
08-23-54	08-23-14
08-23-55	
08-23-56	
08-23-57	
08-23-58	
08-23-59	
08-23-60	
08-23-61	
08-23-62	

Table 2. Recapture data using a beach seine in the Campbell River estuary and Discovery Passage area.

DATE	STN	TIME PST	FISH NUM		TAG CODE	L MM	WT G
850424	08	1545	MC	10	08-23-56	064	2.9
850424	32	1330	MC	01	08-23-61	063	2.1
850424	32	1330	MC	02	08-23-61	062	2.0
850424	32	1330	MC	03	08-23-62	066	2.9
850424	32	1330	MC	04	08-23-61	059	2.0
850424	32	1330	MC	05	08-23-60	065	2.5
850424	32	1330	MC	06	08-23-60	060	2.1
850424	32	1330	MC	07	08-23-62	064	2.6
850424	32	1330	MC	08	08-23-62	061	2.4
850424	322	1455	MC	09	08-23-61	062	2.2
850425	01	1010	MC	41	08-23-53	063	2.8
850425	01	1010	MC	42	08-23-51	059	2.2
850425	01	1010	MC	43	08-23-52	059	2.1
850425	01	1010	MC	44	08-23-52	068	3.5
850425	01	1010	MC	45	08-23-55	068	3.3
850425	01	1010	MC	46	08-23-57	064	2.8
850425	01	1010	MC	47	08-23-55	068	3.5
850425	01	1010	MC	48	08-23-59	062	2.6
850425	01	1010	MC	49	08-23-56	062	2.4
850425	01	1010	MC	50	08-23-57	060	2.3
850425	03	1035	MC	30	08-23-57	064	2.5
850425	03	1035	MC	31	08-23-56	064	2.7
850425	03	1035	MC	32	08-23-58	069	3.7
850425	03	1035	MC	33	08-23-56	054	1.6
850425	03	1035	MC	34	08-23-59	066	3.0
850425	03	1035	MC	35	08-23-55	065	2.8
850425	03	1035	MC	36	08-23-57	070	3.4
850425	03	1035	MC	37	08-23-55	068	3.2
850425	03	1035	MC	38	08-23-57	063	2.8
850425	03	1035	MC	39	08-23-54	065	3.0

DATE	STN	TIME PST	FISH NUM		TAG CODE	L MM	WT G
850425	08	0927	MC	40	08-23-53	061	2.2
850425	24	1400	MC	13	08-23-57	058	1.5
850425	31	1440	MC	11	08-23-61	063	2.0
850425	32	0940	MC	24	08-23-61	060	1.8
850425	32	0940	MC	25	08-23-60	064	2.1
850425	32	0940	MC	26	08-23-61	062	2.0
850425	32	0940	MC	27	08-23-61	067	2.8
850425	32	0940	MC	28	08-23-60	045	0.9
850425	32	0940	MC	29	08-23-60	048	1.0
850425	34	1120	MC	51	08-23-52	053	1.4
850425	322	0925	MC	14	08-23-62	065	2.4
850425	322	0925	MC	15	08-23-61	066	2.6
850425	322	0925	MC	16	08-23-60	061	1.7
850425	322	0925	MC	17	08-23-62	065	2.3
850425	322	0925	MC	18	08-23-61	065	2.2
850425	322	0925	MC	19	08-23-61	065	2.4
850425	322	0925	MC	20	08-23-61	067	2.5
850425	322	0925	MC	21	08-23-62	067	3.0
850425	322	0925	MC	22	08-23-60	065	2.2
850425	322	0925	MC	23	08-23-61	055	1.6
850425	324	1030	MC	12	08-23-60	068	2.7
850508	34	1700	MC	76	08-23-59	058	2.0
850509	06	0910	MC	96	08-23-51	070	3.5
850509	06	0910	MC	97	08-23-54	073	4.1
850509	06	0910	MC	98	08-23-56	078	4.7
850509	06	0910	MC	99	08-23-57	078	4.8
850509	06	0910	MC	100	08-23-54	070	3.5
850509	06	0910	MC	101	08-23-54	069	3.3
850509	06	0910	MC	102	08-23-56	074	3.9
850509	06	0910	MC	103	08-23-53	068	3.0

DATE	STN	TIME PST	FISH NUM	TAG CODE	L MM	WT G
850509	06	0910	MC 104	08-23-59	069	3.2
850509	06	0910	MC 105	no pin	077	4.1
850509	07	1755	MC 77	08-23-55	069	3.3
850509	07	1755	MC 78	08-23-59	073	4.2
850509	07	1755	MC 79	08-23-56	069	3.4
850509	07	1755	MC 80	08-23-57	074	3.7
850509	07	1755	MC 81	08-23-51	073	3.7
850509	07	1755	MC 82	08-23-59	074	4.2
850509	07	1755	MC 83	08-23-58	073	3.7
850509	07	1755	MC 84	08-23-52	072	3.9
850509	07	1755	MC 85	08-23-59	063	2.6
850509	07	1755	MC 86	08-23-53	069	3.6
850509	08	0850	MC 87	08-23-56	069	3.3
850509	08	0850	MC 88	08-23-58	070	3.6
850509	08	0850	MC 89	08-23-58	076	4.9
850509	08	0850	MC 90	08-23-60	076	4.6
850509	08	0850	MC 91	no pin	063	2.7
850509	08	0850	MC 92	08-23-55	068	3.2
850509	08	0850	MC 93	08-23-57	073	4.3
850509	08	0850	MC 94	08-23-59	071	3.6
850509	08	0850	MC 95	08-23-54	069	3.5
850509	34	1705	MC 106	08-23-59	078	4.1
850522	01	1635	MC 147	02-30-02	094	8.0
850522	01	1635	MC 148	08-23-54	074	4.7
850522	01	1635	MC 149	08-23-55	068	3.9
850522	01	1635	MC 150	08-23-54	067	3.5
850522	01	1635	MC 151	no pin	073	4.1
850522	01	1635	MC 152	08-23-59	068	3.4
850522	02	1645	MC 146	08-23-57	073	4.3
850522	04	1355	MC 107	08-23-55	071	4.9
850522	04	1355	MC 108	08-23-52	069	3.7
850522	05	1420	MC 122	02-29-51	145	28.6
850522	05	1420	MC 123	02-29-51	113	19.2
850522	05	1420	MC 124	08-23-56	082	6.5
850522	05	1420	MC 125	08-23-53	078	5.1
850522	06	1325	MC 110	02-29-49	141	28.6
850522	06	1325	MC 111	no pin	084	6.8
850522	06	1325	MC 112	08-23-55	079	6.2
850522	06	1325	MC 113	08-23-58	082	5.8
850522	06	1325	MC 114	08-23-53	078	6.3
850522	06	1325	MC 115	08-23-55	080	6.1
850522	06	1325	MC 116	08-23-58	079	5.8
850522	06	1325	MC 117	08-23-54	084	7.0
850522	06	1325	MC 118	08-23-52	082	6.4
850522	06	1325	MC 119	08-23-55	079	6.1
850522	06	1325	MC 120	08-23-57	079	5.6
850522	07	1045	MC 133	02-29-49	128	20.5
850522	07	1045	MC 134	02-29-49	122	18.5
850522	07	1045	MC 135	02-29-62	107	11.1
850522	07	1045	MC 136	no pin	069	3.9
850522	07	1045	MC 137	08-23-56	082	5.9
850522	07	1045	MC 138	08-23-54	077	5.5
850522	07	1045	MC 139	02-30-01	108	13.4
850522	07	1045	MC 140	08-23-56	064	3.7
850522	07	1045	MC 141	08-23-54	073	4.6
850522	07	1045	MC 142	08-23-52	065	3.4
850522	07	1045	MC 143	08-23-56	075	5.0
850522	07	1045	MC 144	08-23-55	078	6.0
850522	07	1045	MC 145	08-23-56	073	4.3
850522	16	1725	MC 154	08-23-56	080	5.1

DATE	STN	TIME PST	FISH NUM	TAG CODE	L MM	WT G
850522	17	1715	MC 109	08-23-59	074	5.4
850522	34	1600	MC 121	08-23-51	072	4.3
850522	35	1440	MC 153	02-29-49	142	22.6
850522	292	1510	MC 126	08-23-60	092	8.6
850522	292	1510	MC 127	08-23-61	089	7.6
850522	292	1510	MC 128	08-23-60	090	7.8
850522	292	1510	MC 129	08-23-62	083	5.7
850522	292	1510	MC 130	08-23-56	084	6.4
850522	292	1510	MC 131	08-23-58	075	4.7
850522	292	1510	MC 132	08-23-60	088	7.1
850523	01	1620	MC 160	08-23-56	076	4.9
850523	04	1630	MC 161	no pin	083	6.9
850523	04	1630	MC 162	08-23-57	083	6.9
850523	04	1630	MC 163	08-23-55	079	5.7
850523	04	1630	MC 164	08-23-53	083	7.2
850523	04	1630	MC 165	08-23-54	074	4.6
850523	08	0900	MC 166	08-23-57	075	4.6
850523	08	0900	MC 167	08-23-51	080	6.3
850523	08	0900	MC 168	08-23-54	073	4.0
850523	23	1400	MC 186	08-23-61	094	8.7
850523	23	1400	MC 187	08-23-57	084	6.2
850523	23	1400	MC 188	08-23-56	079	5.3
850523	23	1400	MC 189	08-23-58	086	7.0
850523	23	1400	MC 190	08-23-61	087	7.3
850523	23	1400	MC 191	08-23-60	086	6.8
850523	23	1400	MC 192	08-23-58	094	8.4
850523	23	1400	MC 193	08-23-54	088	7.7
850523	23	1400	MC 194	08-23-58	082	6.3
850523	23	1400	MC 195	08-23-61	087	7.9
850523	241	1215	MC 158	08-23-61	075	4.5
850523	241	1215	MC 159	08-23-58	075	4.3
850523	322	1000	MC 169	08-23-61	088	7.0
850523	322	1000	MC 170	08-23-60	085	6.5
850523	322	1000	MC 171	08-23-62	089	7.2
850523	322	1000	MC 172	08-23-62	083	6.4
850523	322	1000	MC 173	no pin	082	5.5
850523	322	1000	MC 174	08-23-61	086	7.3
850523	322	1000	MC 175	no pin	077	4.7
850523	322	1000	MC 176	08-23-62	090	7.6
850523	322	1000	MC 177	no pin	114	14.0
850523	322	1000	MC 178	08-23-60	082	5.5
850523	322	1000	MC 179	08-23-61	090	7.3
850523	322	1000	MC 180	08-23-61	080	5.2
850523	322	1000	MC 181	08-23-61	083	5.8
850523	322	1000	MC 182	08-23-60	065	3.0
850523	322	1000	MC 183	no pin	069	3.8
850523	322	1000	MC 184	08-23-60	089	7.1
850523	322	1000	MC 185	08-23-62	075	4.3
850524	37	0855	MC 155	08-23-52	081	5.0
850524	37	0855	MC 156	08-23-57	084	5.8
850524	37	0855	MC 157	08-23-51	074	3.7
850604	07	1505	MC 196	08-23-53	079	5.5
850604	07	1505	MC 197	02-33-22	068	2.5
850604	07	1505	MC 198	02-33-24	084	6.7
850604	07	1505	MC 199	08-23-55	089	7.1
850604	07	1505	MC 200	08-23-55	086	8.0
850604	07	1505	MC 201	02-33-24	094	8.1
850604	07	1505	MC 202	02-33-23	101	9.9
850604	07	1505	MC 203	08-23-56	082	5.3
850604	07	1505	MC 204	08-23-54	077	4.7

DATE	STN	TIME PST	FISH NUM	TAG CODE	L MM	WT G
850604	07	1505	MC 205	02-33-24	097	8.6
850604	07	1505	MC 206	08-23-57	090	7.3
850604	07	1505	MC 207	08-23-56	085	6.2
850604	07	1505	MC 208	08-23-51	076	4.1
850604	07	1505	MC 209	08-23-56	090	6.3
850604	07	1505	MC 210	02-33-24	092	7.3
850604	07	1505	MC 211	08-23-51	087	5.8
850604	07	1505	MC 212	08-23-57	087	6.0
850604	07	1505	MC 213	08-23-57	073	3.5
850605	03	1125	MC 260	02-33-22	104	13.1
850605	03	1125	MC 261	02-33-24	094	8.5
850605	03	1125	MC 262	02-29-16	114	15.1
850605	03	1125	MC 263	02-33-24	088	7.6
850605	03	1125	MC 264	02-33-23	103	12.6
850605	03	1125	MC 265	08-23-52	086	6.7
850605	03	1125	MC 266	02-33-24	092	7.8
850605	03	1125	MC 267	02-33-23	098	9.1
850605	03	1125	MC 268	02-33-24	093	9.1
850605	03	1125	MC 269	08-23-53	103	11.3
850605	03	1125	MC 270	02-33-24	094	8.7
850605	03	1125	MC 271	02-33-23	089	7.7
850605	03	1125	MC 272	08-23-59	098	10.1
850605	03	1125	MC 273	02-33-23	095	8.7
850605	04	1020	MC 306	no pin	093	9.2
850605	04	1020	MC 307	02-33-23	093	9.0
850605	04	1020	MC 308	02-33-24	067	3.7
850605	04	1020	MC 309	02-33-24	066	3.2
850605	04	1020	MC 310	08-23-58	083	7.0
850605	04	1020	MC 311	08-23-56	087	8.2
850605	04	1020	MC 312	08-23-57	080	6.5

DATE	STN	TIME PST	FISH NUM	TAG CODE	L MM	WT G
850605	04	1020	MC 313	02-33-23	091	8.5
850605	04	1020	MC 314	08-23-55	094	8.9
850605	04	1020	MC 315	08-23-59	078	6.1
850605	04	1020	MC 316	08-23-51	086	7.4
850605	04	1020	MC 317	02-33-22	098	11.3
850605	04	1020	MC 318	02-33-22	092	8.6
850605	06	0955	MC 242	08-23-55	088	7.3
850605	06	0955	MC 243	02-33-23	104	13.0
850605	06	0955	MC 244	08-23-53	091	7.9
850605	06	0955	MC 245	02-33-23	096	9.9
850605	06	0955	MC 246	02-33-23	098	10.8
850605	06	0955	MC 247	08-23-58	085	7.2
850605	06	0955	MC 248	08-23-53	091	7.6
850605	06	0955	MC 249	08-23-53	080	5.4
850605	06	0955	MC 250	08-23-51	083	6.9
850605	06	0955	MC 251	02-33-22	090	7.6
850605	06	0955	MC 252	no pin	076	4.4
850605	06	0955	MC 253	02-33-22	097	9.5
850605	06	0955	MC 254	08-23-52	080	5.9
850605	06	0955	MC 255	08-23-53	080	6.4
850605	06	0955	MC 256	08-23-55	083	4.8
850605	07	0830	MC 214	08-23-54	073	4.5
850605	07	0830	MC 215	02-29-50	118	16.4
850605	07	0830	MC 216	02-33-23	089	8.8
850605	07	0830	MC 217	08-23-55	088	7.8
850605	07	0830	MC 218	08-23-59	084	7.3
850605	07	0830	MC 219	08-23-56	086	7.7
850605	07	0830	MC 220	02-33-22	089	9.2
850605	07	0830	MC 221	02-33-23	094	9.8
850605	07	0830	MC 222	08-23-55	093	10.3

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850605	07	0830	MC 223	08-23-53	084	7.2
850605	07	0830	MC 224	08-23-54	099	8.9
850605	07	0830	MC 225	08-23-51	088	8.2
850605	07	0830	MC 226	02-33-23	087	7.5
850605	07	0830	MC 227	08-23-55	085	7.8
850605	08	0845	MC 274	08-23-56	072	3.8
850605	08	0845	MC 275	02-33-23	104	13.1
850605	08	0845	MC 276	02-33-22	109	14.5
850605	08	0845	MC 277	02-33-23	102	12.8
850605	08	0845	MC 278	02-33-24	102	12.7
850605	08	0845	MC 279	no pin	095	10.1
850605	08	0845	MC 280	02-33-23	093	9.4
850605	08	0845	MC 281	08-23-59	080	6.4
850605	08	0845	MC 282	02-33-22	089	8.4
850605	08	0845	MC 283	02-33-24	104	13.2
850605	08	0845	MC 284	02-33-22	109	16.2
850605	08	0845	MC 285	02-33-24	101	12.7
850605	08	0845	MC 286	08-23-57	083	6.5
850605	08	0845	MC 287	02-33-23	091	9.1
850605	08	0845	MC 288	02-33-24	094	9.7
850605	08	0845	MC 289	02-33-22	089	8.3
850605	08	0845	MC 290	no pin	097	10.0
850605	10	0820	MC 238	08-23-59	089	8.3
850605	10	0820	MC 239	02-33-22	092	9.4
850605	10	0820	MC 240	02-33-24	094	9.6
850605	10	0820	MC 241	02-33-22	104	13.9
850605	20	1740	MC 291	02-33-22	100	7.5
850605	20	1740	MC 292	02-33-24	103	10.4
850605	20	1740	MC 293	02-33-24	098	8.7
850605	20	1740	MC 294	02-33-23	094	6.8

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850605	20	1740	MC 295	02-33-23	097	6.8
850605	20	1740	MC 296	02-33-23	095	7.4
850605	20	1740	MC 297	02-33-22	093	5.9
850605	20	1740	MC 298	02-33-22	102	8.7
850605	20	1740	MC 299	02-33-23	099	8.4
850605	20	1740	MC 300	02-33-23	093	6.8
850605	20	1740	MC 301	02-33-23	094	6.8
850605	20	1740	MC 302	08-23-54	089	6.8
850605	21	1335	MC 228	02-33-24	094	8.3
850605	21	1335	MC 229	08-23-52	075	5.2
850605	21	1335	MC 230	02-33-22	100	9.3
850605	21	1335	MC 231	02-33-22	101	10.2
850605	21	1335	MC 232	02-33-22	098	9.2
850605	21	1335	MC 233	08-23-56	084	6.7
850605	21	1335	MC 234	02-33-22	098	9.3
850605	21	1335	MC 235	02-33-22	098	8.8
850605	21	1335	MC 236	08-23-59	091	8.3
850605	21	1335	MC 237	02-33-23	088	6.5
850605	23	1440	MC 321	02-33-22	097	9.4
850605	34	1705	MC 319	02-33-22	107	12.2
850605	34	1705	MC 320	02-33-22	093	8.3
850605	241	1605	MC 257	08-23-14	125	14.6
850605	241	1605	MC 258	08-23-13	134	18.3
850605	241	1605	MC 259	02-29-50	130	16.3
850605	292	1355	MC 303	08-23-55	093	8.1
850605	292	1355	MC 304	08-23-56	092	7.5
850605	292	1355	MC 305	08-23-60	094	8.5
850606	01	1005	MC 338	08-23-57	086	8.0
850606	01	1005	MC 339	02-33-24	103	11.8
850606	01	1005	MC 340	08-23-59	094	9.6

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850606	01	1005	MC 341	08-23-54	093	9.8
850606	01	1005	MC 342	08-23-54	094	7.5
850606	01	1005	MC 343	02-33-22	078	4.8
850606	01	1005	MC 344	08-23-51	079	6.8
850606	01	1005	MC 345	08-23-51	086	7.7
850606	04	0940	MC 322	02-33-23	096	8.9
850606	04	0940	MC 323	02-33-24	072	4.1
850606	04	0940	MC 324	08-23-56	075	4.7
850606	20	0800	MC 325	02-33-24	083	5.1
850606	20	0800	MC 326	02-33-22	086	5.7
850606	20	0800	MC 327	08-23-54	091	7.4
850606	20	0800	MC 328	08-23-56	089	6.6
850606	20	0800	MC 329	08-23-62	086	5.6
850606	20	0800	MC 330	08-23-56	087	5.9
850606	20	0800	MC 331	08-23-59	075	4.6
850606	20	0800	MC 332	08-23-55	079	4.6
850606	20	0800	MC 333	02-33-24	088	6.2
850606	20	0800	MC 334	no pin	083	4.8
850606	20	0800	MC 335	02-33-24	087	5.6
850606	20	0800	MC 336	08-23-55	087	6.1
850606	20	0800	MC 337	02-33-24	099	8.2
850606	111	0905	MC 346	02-33-24	087	8.1
850606	111	0905	MC 347	02-33-24	088	8.6
850606	111	0905	MC 348	08-23-51	087	7.6
850606	111	0905	MC 349	08-23-51	090	8.4
850606	111	0905	MC 350	02-33-22	102	12.7
850606	111	0905	MC 351	08-23-53	078	6.3
850611	21	1440	MC 362	02-33-24	099	8.0
850611	21	1440	MC 363	02-29-20	114	14.9
850611	21	1440	MC 364	08-23-59	095	8.4

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850618	06	1310	MC 352	02-33-25	111	15.2
850618	06	1310	MC 353	08-23-56	104	13.2
850618	06	1310	MC 354	02-33-23	101	11.0
850618	06	1310	MC 355	02-33-27	097	11.0
850618	06	1310	MC 356	02-33-23	105	12.3
850618	06	1310	MC 357	02-33-23	105	13.5
850618	06	1310	MC 358	02-33-23	096	11.4
850618	06	1310	MC 359	02-33-23	101	12.3
850618	06	1310	MC 360	08-23-55	090	8.2
850618	06	1310	MC 361	02-33-24	094	9.6
850618	14	1625	MC 380	02-33-30	098	10.7
850618	14	1625	MC 381	02-33-29	088	7.8
850618	15	1615	MC 378	08-23-56	091	7.5
850618	15	1615	MC 379	08-23-56	094	8.5
850618	16	1607	MC 373	02-33-24	091	6.3
850618	16	1607	MC 374	02-33-23	092	8.0
850618	16	1607	MC 375	08-23-54	091	8.2
850618	16	1607	MC 376	08-23-54	081	5.8
850618	16	1607	MC 377	02-33-23	087	6.4
850618	17	1600	MC 368	02-33-24	090	5.9
850618	17	1600	MC 369	08-23-59	092	8.0
850618	17	1600	MC 370	no pin	098	9.4
850618	17	1600	MC 371	08-23-59	103	11.4
850618	17	1600	MC 372	02-33-23	094	9.2
850618	20	1530	MC 365	02-33-28	099	9.7
850618	20	1530	MC 366	02-33-22	097	8.9
850618	20	1530	MC 367	02-33-23	098	9.1
850619	01	0925	MC 385	02-33-22	093	6.2
850619	01	0925	MC 386	08-23-51	090	6.7
850619	02	1315	MC 394	02-33-27	104	13.9

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850619	02	1315	MC 395	08-23-55	090	8.3
850619	02	1315	MC 396	02-33-24	095	8.7
850619	02	1315	MC 397	02-33-27	104	12.7
850619	02	1315	MC 398	02-33-23	099	11.0
850619	02	1315	MC 399	02-33-27	098	10.6
850619	04	0935	MC 387	02-29-63	127	20.5
850619	04	0935	MC 388	08-23-54	090	7.5
850619	04	0935	MC 389	02-33-24	104	11.3
850619	04	0935	MC 390	02-33-22	092	6.6
850619	04	0935	MC 391	02-29-63	129	20.4
850619	04	0935	MC 392	02-33-24	094	8.7
850619	05	1400	MC 400	02-33-28	101	11.5
850619	05	1400	MC 401	02-33-25	104	11.4
850619	05	1400	MC 402	02-33-23	100	9.7
850619	05	1400	MC 403	02-33-24	095	8.7
850619	05	1400	MC 404	02-33-28	097	8.4
850619	07	0850	MC 384	08-23-14	117	15.5
850619	10	0840	MC 382	02-33-23	099	9.1
850619	10	0840	MC 383	02-33-24	098	8.8
850619	11	1640	MC 409	02-33-25	094	8.6
850619	11	1640	MC 410	02-33-29	098	8.9
850619	11	1640	MC 411	02-33-24	090	7.2
850619	18	1620	MC 405	08-23-56	084	6.3
850619	18	1620	MC 406	08-23-53	078	4.7
850619	18	1620	MC 407	08-23-52	089	6.6
850619	18	1620	MC 408	08-23-54	080	4.9
850619	292	1125	MC 393	08-23-53	075	4.2
850620	06	0915	MC 416	02-33-29	094	8.3
850620	06	0915	MC 417	08-23-54	088	7.0
850620	06	0915	MC 418	08-23-53	080	5.4
850620	07	0945	MC 419	02-33-23	091	8.2
850620	23	0800	MC 412	08-23-54	084	6.0
850620	23	0800	MC 413	02-33-24	086	6.0
850620	23	0800	MC 414	02-33-25	086	6.1
850620	23	0800	MC 415	02-33-22	101	9.5
850702	07	1640	MC 436	02-33-26	114	15.9
850702	07	1640	MC 437	02-33-26	116	17.8
850702	07	1640	MC 438	02-33-30	100	11.2
850702	07	1640	MC 439	02-33-28	108	15.1
850702	07	1640	MC 440	02-33-30	101	10.1
850702	20	1545	MC 431	02-33-29	100	9.5
850702	20	1545	MC 432	no pin	097	9.8
850702	20	1545	MC 433	02-33-26	105	9.5
850702	20	1545	MC 434	02-33-30	085	4.8
850702	20	1545	MC 435	02-33-23	099	9.3
850702	21	1450	MC 420	02-33-27	107	13.0
850702	21	1450	MC 421	02-33-20	106	11.4
850702	21	1450	MC 422	02-33-25	119	17.1
850702	21	1450	MC 423	02-33-25	094	7.7
850702	21	1450	MC 424	02-33-24	104	11.9
850702	21	1450	MC 425	02-33-27	100	10.5
850702	21	1450	MC 426	08-23-53	105	12.3
850702	21	1450	MC 427	02-23-24	113	15.2
850702	21	1450	MC 428	02-33-29	076	4.8
850702	21	1450	MC 429	02-33-22	110	13.0
850702	21	1450	MC 430	08-23-59	102	11.2
850703	04	0910	MC 446	08-23-14	161	37.0
850703	04	0910	MC 447	02-33-30	087	7.3
850703	04	0910	MC 448	02-33-29	093	7.1
850703	04	0910	MC 449	02-33-24	082	5.0

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850703	04	0910	MC 450	02-33-28	090	6.9
850703	04	0910	MC 451	02-33-23	094	7.4
850703	05	0925	MC 452	no pin	100	9.6
850703	05	0925	MC 453	02-33-28	109	11.8
850703	05	0925	MC 454	02-33-27	095	7.9
850703	05	0925	MC 455	02-33-26	105	11.3
850703	05	0925	MC 456	02-33-24	103	10.5
850703	05	0925	MC 457	02-33-29	084	5.5
850703	07	1535	MC 475	02-33-29	093	8.1
850703	07	1535	MC 476	02-33-27	099	9.8
850703	08	0830	MC 444	02-33-28	104	12.2
850703	08	0830	MC 445	08-23-54	088	7.4
850703	11	1700	MC 478	02-33-24	104	12.3
850703	11	1700	MC 479	02-33-23	110	14.3
850703	11	1700	MC 480	02-33-23	087	7.4
850703	11	1700	MC 481	02-33-26	109	14.0
850703	11	1700	MC 482	02-33-23	093	8.4
850703	11	1700	MC 483	02-33-28	104	12.0
850703	18	1640	MC 477	02-33-30	089	7.6
850703	23	1145	MC 458	02-33-24	094	8.0
850703	23	1145	MC 459	02-33-27	087	5.7
850703	23	1145	MC 460	08-23-51	088	6.1
850703	24	1100	MC 463	08-23-55	106	10.8
850703	24	1100	MC 464	02-33-25	096	7.5
850703	24	1100	MC 465	02-33-25	098	7.8
850703	24	1100	MC 466	02-33-22	109	10.9
850703	27	1420	MC 467	02-33-29	114	15.5
850703	34	1500	MC 468	08-23-59	090	6.6
850703	34	1500	MC 469	02-33-30	093	6.6
850703	34	1500	MC 470	02-33-34	094	7.4
850703	34	1500	MC 471	02-33-29	094	7.4
850703	34	1500	MC 472	02-33-22	091	7.6
850703	34	1500	MC 473	02-33-24	083	4.5
850703	34	1500	MC 474	02-33-29	088	6.5
850703	292	1220	MC 461	02-33-24	090	6.8
850703	292	1220	MC 462	02-33-27	093	7.5
850704	04	0820	MC 441	02-33-23	108	12.0
850704	04	0820	MC 442	08-23-54	087	6.5
850704	04	0820	MC 443	08-23-52	080	5.5
850716	01	1545	MC 490	02-33-28	108	13.1
850716	07	1730	MC 491	02-33-30	100	10.7
850716	07	1730	MC 492	02-33-30	101	11.6
850716	07	1730	MC 493	02-33-30	104	11.2
850716	07	1730	MC 494	02-33-06	093	8.0
850716	07	1730	MC 495	02-33-26	105	12.4
850716	20	1535	MC 486	02-33-06	091	6.4
850716	20	1535	MC 487	02-33-27	112	13.1
850716	20	1535	MC 488	02-33-58	080	6.0
850716	20	1535	MC 489	02-33-06	089	6.3
850716	21	1439	MC 484	02-33-06	090	7.7
850716	21	1439	MC 485	02-33-20	099	8.7
850717	02	1440	MC 525	02-33-24	118	18.1
850717	02	1440	MC 526	08-23-51	126	24.7
850717	02	1440	MC 527	02-33-28	110	15.0
850717	02	1440	MC 528	02-33-28	109	14.3
850717	02	1440	MC 529	02-33-06	097	8.9
850717	05	0854	MC 501	02-33-30	102	11.7
850717	05	0854	MC 502	02-33-29	105	11.5
850717	05	0854	MC 503	02-33-27	104	11.4
850717	05	0854	MC 504	02-33-30	105	10.8

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850717	05	0854	MC 505	02-33-25	105	11.3
850717	05	1338	MC 524	02-29-21	178	56.8
850717	07	0817	MC 496	08-23-52	092	9.6
850717	07	0817	MC 497	02-33-27	114	15.8
850717	07	0817	MC 498	02-33-28	108	13.9
850717	07	0817	MC 499	02-33-28	120	16.8
850717	07	0817	MC 500	02-33-27	104	11.8
850717	23	0950	MC 506	no pin	115	15.5
850717	23	0950	MC 507	02-33-24	118	18.8
850717	23	0950	MC 508	no pin	104	9.8
850717	23	0950	MC 509	02-33-59	093	7.7
850717	23	0950	MC 510	02-33-35	105	13.5
850717	24	1022	MC 511	02-33-06	085	5.0
850717	24	1022	MC 512	02-33-30	100	8.7
850717	24	1022	MC 513	02-33-30	108	11.9
850717	24	1022	MC 514	02-33-06	084	5.4
850717	24	1022	MC 515	02-33-28	102	8.3
850717	25	1110	MC 516	02-32-42	097	8.8
850717	25	1110	MC 517	02-33-59	094	7.4
850717	25	1110	MC 518	02-33-57	104	10.9
850717	28	1159	MC 519	02-33-28	115	14.5
850717	28	1159	MC 520	02-33-22	119	18.3
850717	28	1159	MC 521	02-33-26	126	20.1
850717	28	1159	MC 522	02-33-27	111	12.1
850717	28	1159	MC 523	02-33-60	104	11.1
850718	04	0934	MC 531	02-33-28	106	12.6
850718	04	0934	MC 532	02-33-29	117	17.1
850718	04	0934	MC 533	02-33-23	100	10.9
850718	04	0934	MC 534	08-23-51	110	16.4
850718	04	0934	MC 535	02-33-30	105	10.4
850718	20	0903	MC 530	02-33-60	094	6.7
850719	34	1440	MC 536	02-33-22	094	7.3
850719	34	1440	MC 537	08-23-53	098	10.1
850719	34	1440	MC 538	02-33-22	099	7.4
850729	01	1445	MC 550	02-33-29	98	10.4
850729	01	1445	MC 551	02-33-06	101	11.7
850729	04	1500	MC 552	02-33-22	105	11.7
850729	06	1400	MC 545	02-33-22	133	30.7
850729	06	1400	MC 546	02-33-23	144	40.3
850729	06	1400	MC 547	02-33-28	125	23.2
850729	06	1400	MC 548	02-33-28	111	17.0
850729	06	1400	MC 549	08-23-59	136	32.5
850729	07	1340	MC 542	02-29-17	099	10.2
850729	07	1340	MC 543	08-23-56	096	11.7
850729	07	1340	MC 544	no pin	117	19.8
850729	10	1320	MC 539	02-23-29	112	17.2
850729	10	1320	MC 540	no pin	101	12.4
850729	10	1320	MC 541	02-33-24	083	7.0
850729	20	1515	MC 553	02-33-38	097	8.7
850729	21	1535	MC 555	08-23-52	088	7.4
850729	21	1535	MC 556	02-31-47	093	7.3
850729	111	1530	MC 554	08-23-54	098	1.6
850730	07	1345	MC 569	08-23-52	71	4.4
850730	07	1345	MC 570	02-33-29	109	15.5
850730	10	1355	MC 571	08-23-53	108	15.5
850730	10	1355	MC 572	02-33-06	101	10.7
850730	10	1355	MC 573	02-33-30	92	8.3
850730	21	0900	MC 557	02-33-60	101	10.8
850730	21	0900	MC 558	08-23-58	111	15.0
850730	21	0900	MC 559	02-33-06	100	10.5

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850730	21	0900	MC 560	02-33-57	89	6.1
850730	21	0900	MC 561	02-33-21	101	10.9
850730	21	0900	MC 562	02-32-17	108	13.5
850730	21	0900	MC 563	02-33-28	117	17.3
850730	21	0900	MC 564	08-33-52	114	15.2
850730	21	0900	MC 565	02-33-29	121	19.9
850730	24	1125	MC 568	02-33-06	93	7.4
850730	37	1535	MC 574	08-23-52	97	11.5
850730	292	0930	MC 566	02-33-06	91	6.6
850730	292	0930	MC 567	02-33-06	93	7.4
850731	01	0905	MC 575	08-23-53	111	16.5
850731	04	0925	MC 576	02-33-24	82	6.2
850731	04	0925	MC 577	02-33-23	120	19.9
850731	04	0925	MC 578	02-33-06	88	6.6
850731	07	1000	MC 579	02-33-30	108	14.2
850813	06	1515	MC 583	02-33-26	108	15.9
850813	06	1515	MC 584	02-33-29	111	18.2
850813	07	1445	MC 580	02-33-06	93	9.6
850813	07	1445	MC 581	02-33-06	109	18.4
850813	08	1500	MC 582	no pin	86	8.6
850814	21	0900	MC 585	02-33-06	90	8.2
850814	21	0900	MC 586	02-33-20	111	15.4
850814	21	0900	MC 587	08-23-58	114	16.9
850814	21	0900	MC 588	02-33-33	123	19.8
850814	27	1025	MC 589	02-33-06	103	12.3
850815	05	1225	MC 600	02-33-06	94	10.4
850815	05	1225	MC 601	02-33-26	111	16.8
850815	05	1225	MC 602	02-33-28	113	14.3
850815	05	1225	MC 603	no pin	112	16.7
850815	24	1010	MC 591	02-33-28	113	16.7
850815	24	1010	MC 592	02-33-06	98	10.7
850815	24	1010	MC 593	02-33-06	103	11.9
850815	24	1010	MC 594	02-33-06	115	18.5
850815	24	1010	MC 595	02-33-06	93	9.6
850815	24	1010	MC 596	02-33-06	106	12.9
850815	24	1010	MC 597	02-33-06	113	16.6
850815	24	1010	MC 598	08-23-51	109	14.1
850815	24	1010	MC 599	no pin	103	12.6
850815	241	0935	MC 590	02-33-06	102	10.4
850827	04	1455	MC 605	02-29-49	143	27.4
850827	06	1440	MC 604	02-33-22	114	17.4
850828	21	1140	MC 607	02-33-06	105	13.3
850828	21	1140	MC 608	02-33-58	119	17.7
850828	21	1140	MC 609	02-33-21	127	21.1
850828	21	1140	MC 610	02-33-59	100	11.9
850828	21	1140	MC 611	02-33-58	129	26.1
850828	21	1140	MC 612	02-33-58	122	21.2
850828	21	1140	MC 613	02-33-35	138	33.4
850828	28	1100	MC 606	02-33-60	125	21.8
850829	04	0825	MC 625	02-33-30	133	26.9
850829	04	0825	MC 626	08-23-52	134	29.6
850829	04	0830	MC 627	02-29-22	213	120.2
850829	06	0810	MC 616	08-23-52	125	25.8
850829	06	0810	MC 617	02-33-29	131	29.1
850829	06	0810	MC 618	02-33-30	137	33.2
850829	06	0810	MC 619	02-33-22	168	59.3
850829	06	0810	MC 620	02-33-22	162	61.1
850829	06	0810	MC 621	02-33-22	128	26.9
850829	06	0810	MC 622	02-33-30	152	52.3
850829	06	0810	MC 623	no pin	135	34.3

DATE	STN	TIME PST	FISH NUM	TAG CODE	L MM	WT G
850829	06	0810	MC 624	02-33-24	200	115.9
850829	07	0745	MC 614	no pin	125	24.1
850829	07	0745	MC 615	08-23-55	100	13.8

Figure 1. Chart of the Campbell River estuary showing stations where beach seining was conducted in 1985.

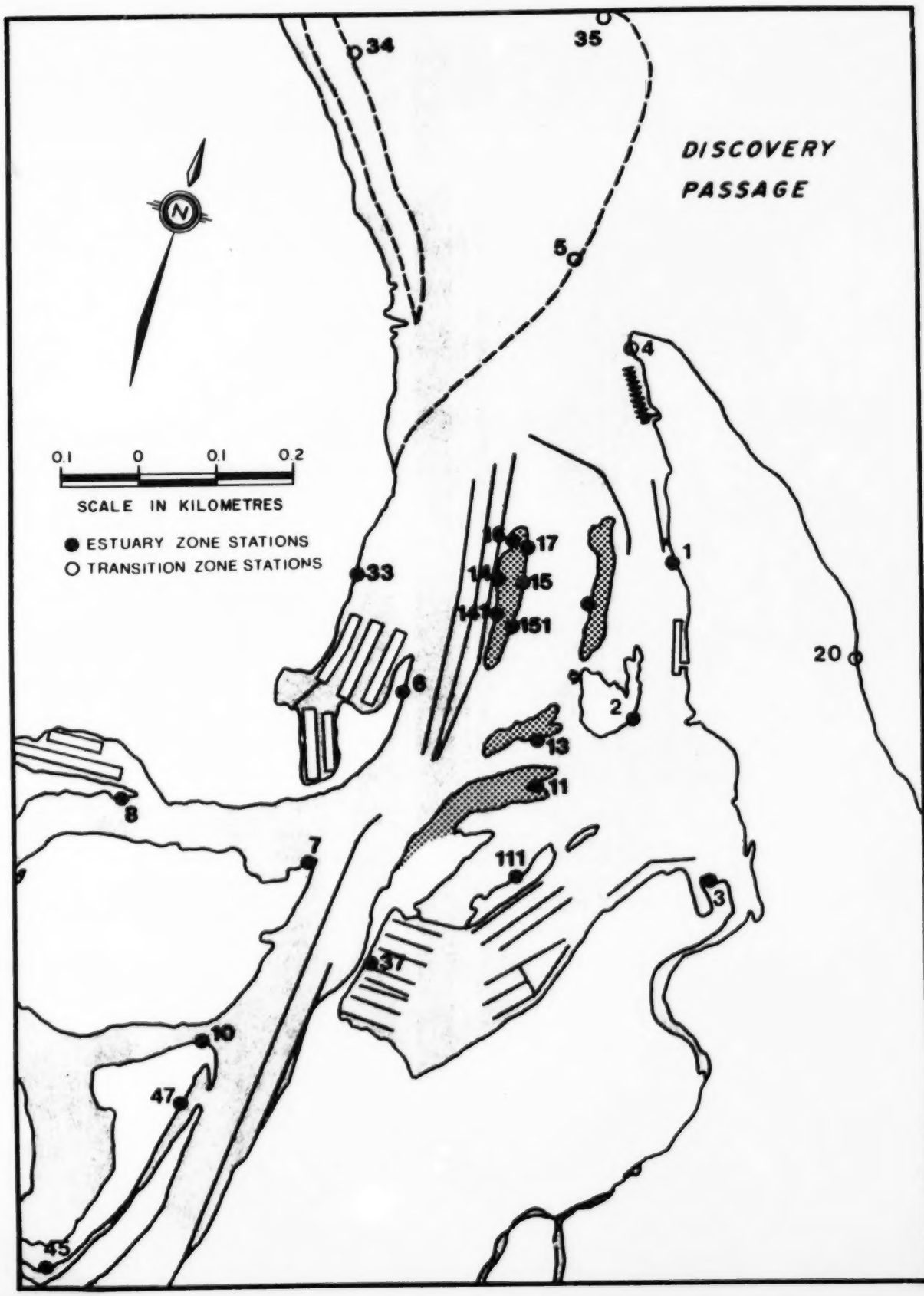
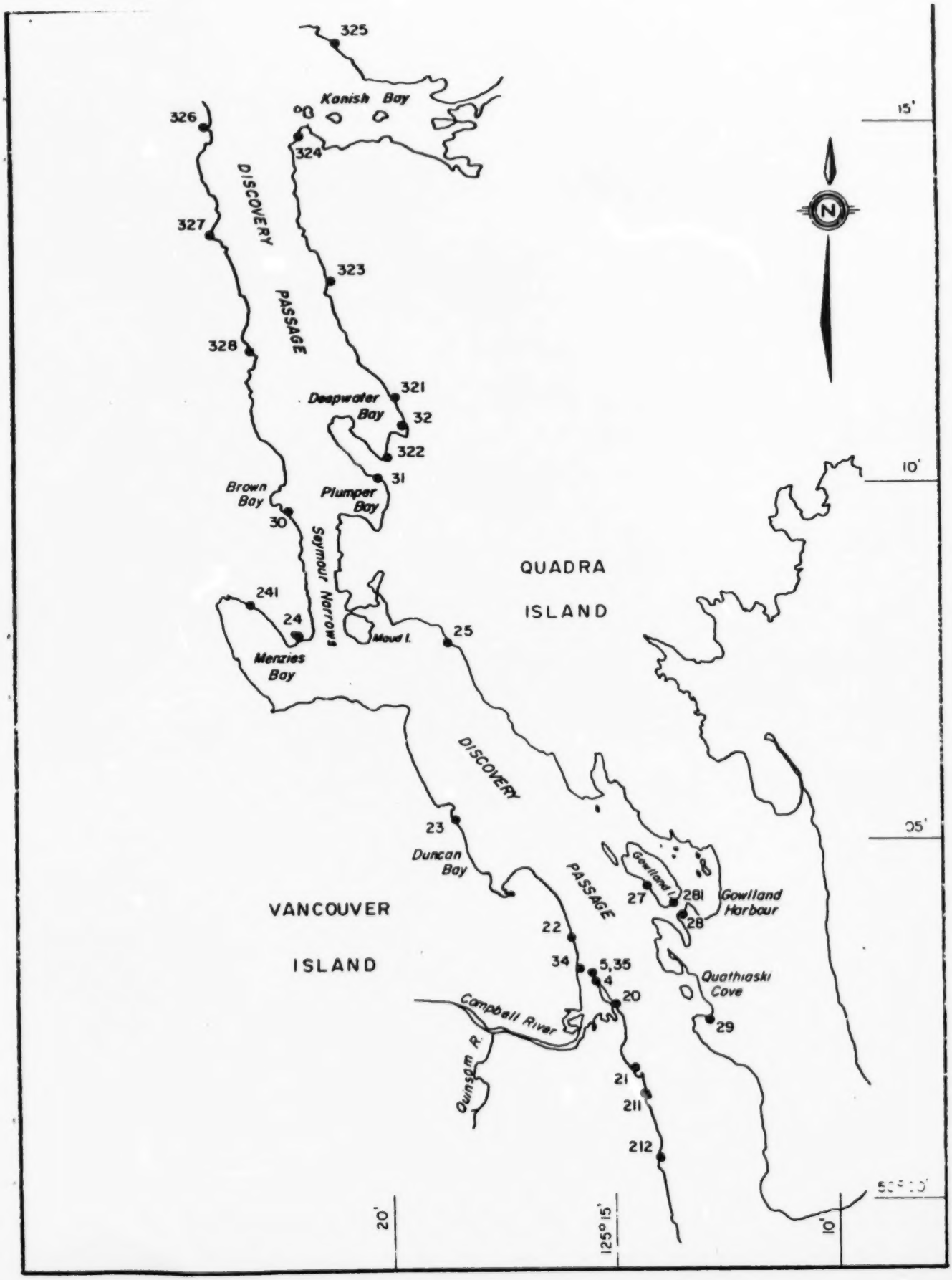

DISCOVERY
PASSAGE
N
0.1 0 0.1 0.2
SCALE IN KILOMETRES
ESTUARY ZONE STATIONS
TRANSITION ZONE STATIONS
34
35
5
4
1
20
2
33
6
17
15
151
13
11
111
8
7
3
31
10
47
45

Figure 2. Chart of Discovery Passage showing stations where beach seining was conducted in 1985.


325
Kanish Bay
326
324
DISCOVERY
PASSAGE
327
323
328
321
Deepwater Bay
32
322
31
Brown Bay
Plumper Bay
30
Seymour Narrows
241
24
Menzies Bay
Maud I.
25
QUADRA ISLAND
DISCOVERY
23
Duncan Bay
PASSAGE
Gowlland I.
27
281
Gowlland Harbour
28
VANCOUVER ISLAND
22
34
5,35
4
20
Quathiaski Cove
Campbell River
29
Quinsam R.
21
211
212
15'
10'
05'
50° 10'
20'
125° 15'
10'
N